

Recognizing Prairie Mole Cricket Calls

The Lost Cricket Project is recruiting citizen scientists in Oklahoma to help find new populations of the rare prairie mole cricket during the months of March through May.

As you learned in the previous video, male prairie mole crickets produce a mating call during the months of March to May. This call usually starts at sunset and can continue for around 30-40 minutes. This is the sound of a single male prairie mole cricket call (*recording playing*). This is the same call after filtering out wind noise (*recording playing*). Most of the time, several prairie mole crickets call at the same time near each other in a group called a "lek." This is how it sounds when several prairie mole crickets are calling simultaneously (*recording playing*). Notice how the prairie mole crickets produce a chirping sound. The timing pattern of the prairie mole cricket call can vary a lot. Sometimes they chirp just over once a second whereas other times they can chirp almost 4 times per second; this chirp rate is influenced by the temperature. On average, prairie mole crickets produce about 3 chirps per second. Although the timing of the call varies, the pitch stays the same. The pitch is also known as the dominant frequency. When listening for prairie mole crickets, it is possible to identify their call by paying attention to their pitch.

While conducting surveys for prairie mole crickets, you may hear some of these interesting natural sounds. This is the sound of a nighthawk (*recording playing*). The low frequency sound you hear is produced when the male bird dives through the air during a courtship display. This is the call of the bird known as the Chuck-will's-widow (*recording playing*). The bird is named after its call since it sounds like it is saying the phrase "Chuck will's widow." You may also hear the gobbling of turkeys (*recording playing*), and the sound of the red-winged blackbird (*recording playing*). Given that prairie mole crickets call in spring, you will also likely hear the sound of frogs and toads. This is the sound of an American toad (*recording playing*).

You will hear many other sounds while conducting bioacoustic surveys that are not included in this video. If you think that you hear a prairie mole cricket, please record and submit the recording! We will be able to listen to the recording using analytical software to confirm if the recording was a prairie mole cricket. We can then notify you if the recording was of a prairie mole cricket or a similar sound. All recordings provide valuable information to scientists. For example, they can provide an idea of what animals are found in different locations at different times of the year. In the next video, you will learn how to download and use the Lost Cricket Project survey app.

